



Planning & Community
Development

Medium Impact Project

Single-family

This handout is intended to provide guidance when developing the surface water management portion of a site development plan for projects that trigger Minimum Requirements 1-5 according to the 2012 *Stormwater Management Manual for Western Washington* (Volume I, Chapter 2.5.5). This manual, published by the Department of Ecology, provides two options to meet Minimum Requirement #5 Manage Stormwater Onsite:

1. Meet the Low Impact Development performance standard, which requires an engineer design, or
2. Design surface water using List #1. The results of soils analysis and infiltration testing performed by licensed professionals are needed to use List #1.

Low Impact Development Performance Standard

Stormwater discharges shall match developed discharge durations to pre-developed durations for the range of pre-developed discharge rates from 8% of the 2-year peak flow to 50% of the 2-year peak flow.

List #1

The BMP¹s must be applied in the order listed. Refer to the SWMMWW and use the first BMP that is considered feasible.

BMP	Title	2012 SWMMWW	Comments
Lawn and landscaped areas:			
BMP T5.13	Post-Construction Soil Quality and Depth	Volume V Chapter 5	REQUIRED
Roofs:			
BMP T5.30	Full Dispersion	Volume V Chapter 5	Not feasible
BMP T5.10A	Downspout Full Infiltration	Volume III Section 3.1.1	1. Solis classification (Vol III Page 3-4) 2. GWT ²
BMP T5.14	Rain Gardens	Volume V Chapter 5 <i>Rain Garden Handbook</i>	1. Infiltration test 2. GWT ²
BMP T5.10B	Downspout Dispersion Systems	Volume III Section 3.1.2	
BMP T5.10C	Perforated Stub-out Connections	Volume III Section 3.1.3	
Other Hard Surfaces:			
BMP T5.30	Full Dispersion	Volume V Chapter 5	Not feasible
BMP T5.15	Permeable pavement	Volume V Chapter 5	1. Infiltration test 2. GWT ²
BMP T5.14	Rain Gardens	Volume V Chapter 5 <i>Rain Garden Handbook</i>	1. Infiltration test 2. GWT ²
BMP T5.12	Sheet Flow Dispersion	Volume V Chapter 5	
BMP T5.11	Concentrated Flow Dispersion	Volume V Chapter 5	

¹ Best Management Practice

² Groundwater table elevation

Business Hours: M – F 8:00 a.m. to 5 p.m. ♦ Permit Processing Hours: M – F 8 a.m. to 4:00 p.m.

Note: This handout is for informational use only and is not to be substituted for the Shoreline Development Code.

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Infiltration Test Methods³

1. 2012 *Engineering Development Manual* Appendix H Pilot Infiltration Test
2. 2012 SWMMWW Volume III, Section 3.3.6, Page 3-77 Small-scale Pilot Infiltration Test

³ Grain size analyses may substitute for infiltration tests ONLY on sites with soils unconsolidated by glacial advance.

References

2012 *Stormwater Management Manual for Western Washington*

<https://fortress.wa.gov/ecy/publications/summarypages/1210030.html>

Rain Garden Handbook for Western Washington Homeowners

http://county.wsu.edu/mason/nrs/water/Documents/Raingarden_handbook.pdf

2012 *Engineering Development Manual* Appendix H Pilot Infiltration Test

<http://www.cityofshoreline.com/index.aspx?page=251>

Resources

If you have any questions regarding preparation of your site development plan, please contact a Development Review Engineer by visiting Planning & Community Development in person or by calling (206) 801-2500. Ask to speak to a Development Review Engineer.



Planning & Community Development

Surface Water Summary Form

Project Address:		Date:
Contact / Prepared By:		Phone:
Mailing Address:		
Project Description:		
Impervious – Existing (square feet)		
Impervious – Proposed Total (square feet)		
Impervious – Proposed New (square feet)		
Impervious – Proposed Replaced (square feet)		
Land Disturbance – Proposed (square feet)		
Cut – (cubic yards)		
Fill – (cubic yards)		
Native Vegetation – Proposed Retention (square feet)		
Site Area (square feet)		
Critical Area or Special Drainage Area onsite or abutting: (circle) Landslide Seismic Wetland Flood Stream Shoreline Erosion Hazard None		
Flattest slope on site (Vertical:Horizontal) -		
Steepest slope on site (Vertical:Horizontal) -		
Property Description: (natural features and area, slopes (V:H), trees/shrubbery/grass areas, etc.)		
Existing Structures and Improvements: (buildings, driveways, patios, sidewalks etc. and areas in square feet or acres)		

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